CONTENTS TO VOLUME 47

Vol. 47 No. 1 October 1989

Y. LIRITZIS / Greek Archaeomagnetic Intensities: Some Aspects of Reliability and Geophysical Implications 1

A. A. DE ALMEIDA, P. D. SINGH, and C. M. BURGOYNE / Haser Model CN, C_2 and C_3 Production Rates in Some Comets 15

JOSEPH A. NUTH III / Processes Affecting the Composition and Structure of Silicate Grains in Cometary Nuclei 33

M. VERRONEN / Approximate Calculations of Collisional Mean Values for Particulate Systems 51

H. MAVROMICHALAKI / Application of Diffusion – Convection Model to Diurnal Anisotropy Data 61

OSMAN M. KAMEL / Third-Order Jupiter-Saturn Planetary Theory 73

ANDREA CIMATTI / Plasma Tail of Comet Bradfield 1987s during 1987 October 19–20 91

Letter to the Editor

KENT D. TREGO / The Absence of Large-Scale Volcanic Crater Subsidence in Ishtar Terra on Venus 105

Vol. 47 No. 2 November 1989

W. KÖHNLEIN / A Model of the Terrestrial Ionosphere in the Altitude Interval 50–4000 km. II. Molecular Ions (N_2^+, NO^+, and O_2^+) and Electron Density 109

TAMER ATAÇ / On the Short-Term Variations of Solar Activity during Solar Cycle 21 165

MOHAMED ADEL SHARAF, MERVAT EL-SAYED AWAD, and MONA A. BANAJA / Efficient Algorithms for the Earth's Gravitational Potential and its Partial Derivatives for Satellite Prediction 171

MACIEJ WINIARSKI / Photographic Observations of the Cloud in the Neighbourhood of Libration Point L_5 of the Earth-Moon System 193

Vol. 47 No. 3 December 1989

M. BAHGAT EL-SHAARAWY / Rotational Distortion of Stars Having Arbitrary Structure Described by Fourth-Order Sectorial Harmonics. I. Equipotential Surfaces in Sectorial Harmonics 217

P. D. SINGH, K. SINHA, B. M. TRIPATHI, and HELOISA M. B. ROBERTY / An Analysis of Spectrophotometric Observations of Comets Austin (1982g) and Bradfield (1980t) 231

OSMAN M. KAMEL and ADEL S. SOLIMAN / Expansion of the First-Order Planetary Disturbing Function by Smart's Method. Part I: Principal Part 241

Z. KOPAL, M. MOUTSOULAS, and F. B. WARANIUS / Bibliography 265

Volume Contents 299
Author Index 301